HEALTH CARE AND THE CLIMATE CRISIS: PREPARING AMERICA'S HEALTH CARE INFRASTRUCTURE

VIII. Discussion, Methodology, and Limitations

This is the eighth part of a Staff Report focused on the U.S. health system and the climate crisis. Parts One through Five explored the ways health care providers are responding to the climate crisis. Part Six provides an overview of Ranking Member Neal's expanded Request for Information (RFI) relating to the health care supply chain and the climate crisis. Part Seven analyzes Group Purchasing Organization (GPO) responses to this expanded RFI. The following part includes a discussion of the findings and overview of methods.

PART 8: KEY TAKEAWAYS

In 2020, the United States (U.S.) was the world's second largest emitter of greenhouse gasses (GHG), with its health care sector representing an estimated 8.5 percent of national emissions – a majority of which come from the medical supply chain (e.g., manufacturing and delivery of medications and medical supplies and devices). Nearly every large hospital and health system in the U.S. is a member of multiple GPOs for supply and device procurement necessary for the delivery of care. Through their market power, GPOs are in a position to hold medical suppliers and manufacturers accountable for their emissions. Accordingly, the three GPOs representing nearly 80 percent of the entire U.S. market share – Vizient, Premier, and HealthTrust – provided feedback to the Ways and Means Committee on the actions they have taken in response to extreme weather events and their progress in leveraging market power to effect environmental, social, and governance change through their supplier contracts.

Extreme weather events: GPOs respondents said they support their members in a variety of ways during environmental disasters. They often serve as a centralized source of information for members and suppliers during the immediate aftermath of a natural disaster, identifying shortages and managing the logistics to deliver resources to hospitals in need. In this capacity, GPOs allow members to focus on providing care, while the GPO addresses resource needs.

Contractual standards: Although the three GPOs acknowledged the growing consequences of the climate crisis on their industry and the corresponding need to act, the GPOs are still in the early phases of identifying specific environmental metrics related to their supplier operations that they will need to track and improve. Despite the large market share the three GPOs that participated in this RFI represent, to date, they do not have contractual requirements in place to compel suppliers to improve their environmental, social, or governance standards.

In many ways, the findings from this GPO-focused RFI are similar to those published from the earlier provider survey in Parts One through Five. Responses from Vizient, Premier, and HealthTrust revealed an industry with keen awareness of the challenging implications extreme weather events pose on the health care supply chain – yet only beginning to contemplate ways to leverage purchasing power to address the environmental and social impacts of the health care supply chain through contractual relationships. Unlike in the case of the providers that responded to the initial RFI – revealing a disparate and heterogenous set of local, regional, and national challenges – the GPOs solicited for this study reflected a highly consolidated market that could be easily shifted by the bold actions of a few.

Respondents acknowledged their vital role in ensuring care continuity during natural disasters, describing their experiences maintaining supplier product availability and coordinating logistics in times of need. Further, all three GPOs expressed similar concerns about the increasing risk of extreme weather events on patient safety and the operations of their members. While not a climate-related event, the COVID-19 pandemic provided a stark reminder of the interconnectedness of economies around the world, standing as a clarion call for improvements to the resiliency of the health care supply chain nationally and across the globe.

Despite the health care supply chain's significant contribution to the health care sector's green house gas emissions, GPO responses did not articulate a clear link between the supply chain's environmental impact and GPOs' ability to require or incentivize improvements in environmental (and social) standards through its contracts with suppliers. While all three respondents pointed to a variety of initiatives they have launched to *encourage* change, the absence of clear requirements or enforcement mechanisms in the case of environmental, social, and governance (ESG) standards revealed a field with significant opportunities for advancement.

Across the GPOs, work to advance environmental goals appears more developed than in the case of social or governance goals, yet concrete evidence of productive improvements in supplier behavior and member engagement remains elusive in all areas, based on the information GPOs shared with the Committee. The anecdotal experiences GPOs reported in response to many of the survey questions were a sign of interest in more effectively engaging suppliers on ESG issues – indeed, perhaps even helping to develop standards – but absent more concrete data, greenwashing risks abound.

Given the size of the GPOs that participated in the RFI, their internal measurement, publication, and improvement in ESG metrics will continue to remain influential in transforming the sector. Both Vizient and Premier have begun the work in this area, yet efforts still remain nascent, with significant room to grow. It is likely that as GPO members become increasingly engaged on these issues, the demand for such corporate accountability of suppliers will only continue to expand.

Nationally, ESG and corporate social responsibility (CSR) reporting have become commonplace among American businesses, as investors demand more accountability in the areas of climate risk, carbon emissions, human rights, diversity, and business ethics, just to name a few. The opportunities to build on these burgeoning initiatives leveraged through health care GPOs abound. Such experiences can provide a road map for the health care sector to likewise improve transparency and, in turn, accountability on these issues. Globally, the European Union is beginning to set standards for companies operating within its boundaries, suggesting opportunities for partnerships, particularly when it comes to a U.S. health care supply chain that is not limited to our national boundaries. In fact, the early stages of this work in Europe and beyond present an opportunity for the U.S. to leverage its size to help craft uniform standards that enable companies to improve their business practices without having to adhere to a confusing set of misaligned benchmarks across nations.

While the onus for improving environmental and social standards throughout the health care supply chain certainly does not reside with GPOs alone, they have an opportunity to be a leader in advancing productive change. In the end, such change has the potential to not only improve the resiliency of the health care supply chain, but it also has the potential to address bourgeoning member desires for accountability, as shown through climate-related engagement measures included through the provider-based survey conducted as part of Parts One through Five of this report. In the end, results from the surveys included in this RFI clearly show that well-meaning intention alone will not solve the challenges facing the health care industry as the 21st century progresses. Instead, concrete, data-driven action must be the lodestar all actors strive for as a means to collaboratively ensure resilience and rapidly improve environmental and social performance in the sector against emerging climate-related threats to patient safety.

METHODS

a. Data collection

On March 24, 2022, House Ways and Means Committee Ranking Member Richard E. Neal called on 14 leading health systems to partner with the Ways and Means Committee to address the impacts of the health care sector on the climate crisis through a Request for Information (RFI).[1] This request was expanded on April 1, 2022, to two national dialysis companies and 10 trade associations with facility-based health providers.[2] Letters released to the health care sector's trade associations included a further request that they solicit feedback from a sample of their members. Ranking Member Neal sent a third round of

[1] The original RFI only included 12 organizations; subsequently, staff learned about two additional large health systems that had equivalent experience managing and addressing climate-related issues. Staff determined these additional organizations belonged in the first batch of surveyed providers and added them to the original 12 to make 14 "climate innovators."

[2] Three additional trade associations submitted unsolicited responses to the survey, which were incorporated to make 13 total responses.

surveys to the nation's three leading GPOs on July 29, 2022, to solicit feedback on how they use their position and contracting prowess to reduce the impact of the health care supply chain on the climate crisis. The following methodological description pertains to that third survey. For a description of methods employed for the first two surveys, see Part Five of the Committee's report.

b. Survey development and design

Ways and Means staff created a survey through an online tool (Survey Monkey) tailored to GPOs. Staff created the survey based on a review of the extant literature, expert input, and prior discussions with GPOs. Questions drilled down on the following topics: 1) the impact of the climate crisis and the way GPOs assist their members in preparing for and responding to extreme weather events, 2) the extent to which GPOs leverage purchasing power and influence *environmental change* through their contracting standards, 3) the extent to which GPOs leverage purchasing power and influence *social and governance change* through their contracting standards, and 4) internal GPO efforts in ESG reporting and benchmarks.

The survey design process involved: 1) identifying overarching domains related to the broad research questions; 2) developing questions for each domain; 3) formatting questions into multiple choice, Likert-scale, or open response questions when appropriate; 4) creating an option for organizations to provide their own ESG or CSR reports through an upload option; 5) performing multiple survey audits to eliminate errors; and 6) soliciting feedback from multiple stakeholders and content-area experts to ensure appropriateness of research and survey questions.

c. Analysis

As reported in Part Six, due to the consolidated GPO market, the RFI focused on the three GPOs that represent 77 percent of the total GPO market and which, therefore, have purchasing power to effect change: 1) Vizient, 2) Premier, and 3) HealthTrust. Staff downloaded all relevant responses into a database and created an Excel-based analysis matrix to analyze results. The database was arrayed by survey question and, thus, captured both quantitative elements (e.g., yes-no responses) and qualitative responses (i.e., narrative responses to the RFI questions). The analytic tool was mapped to the questions in the RFI to facilitate cross-respondent analyses. Separately, staff pulled data from the provider survey related to GPOs and external partners to include in the analysis (Question 6: "Please list your Group Purchasing Organization if you use one" and Question 54: "For approximately what proportion of your business partners, suppliers, and/or contractors does your organization have sustainability targets" facilitated this additional inquiry). One staff member culled each RFI response, inputting the summaries into the Excel database to create an analytic file.

i. Quantitative analysis

Quantitative analyses focused on integrating GPO-related data from the previous provider analysis into the GPO analytic file. Where appropriate, unique variable names were assigned for importing quantitative data elements into Stata 15.0. Detailed descriptions of variables (i.e., GPO membership, climate events, dedicated resources to address climate crisis, sustainability goals, and use of programs to address climate crisis) can be found in Part Five of the report. The new analysis on GPOs in Part Six and Part Seven included also the following variable:

- *Percentage of external partners who have sustainability targets.* Respondents reported the percentage of their supply chain partners (e.g., business partners, suppliers, and contractors) who have sustainability targets, ranging from: 1) zero percent; 2) more than zero percent but less than 25 percent; 3) more than 25 percent but less than 50 percent; and 4) greater than 50 percent.

Providers were grouped into 1) Vizient, 2) Premier, 3) HealthTrust, 4) Other GPO, and 5) No GPO. Staff conducted bivariate analyses to examine associations among GPO status with climate innovator vs. provider status, organization type, and outcomes related to climate preparedness, organizational climate structure, and percentage of partners who have sustainability targets. Pearson's Chi-square and Fisher's exact tests were performed on these categorical outcomes.

ii. Qualitative analysis

Qualitative analysis was conducted on narrative responses from the RFI. Responses were examined through aggregating categories of questions and cataloguing emergent themes, which were then cross-validated using quantitative findings from the GPO survey and the provider survey.

LIMITATIONS

This study had several important limitations that should be noted. First, the GPO survey only included three respondents due to the current market configuration. Staff believed these three respondents to be the most important to target, given their market share and ability to leverage purchasing power to influence change among suppliers and members. Still, the limited sample size yielded anecdotal findings specific to the experience of those three GPOs alone. It is likely the experiences of suppliers and members of other, much smaller GPOs are quite different.

Second, a large number of narrative descriptions GPOs provided in response to the RFI included unverifiable information and individual anecdotes, rather than hard data. Committee staff members verified such data with independent or published sources, to the extent feasible, but in many cases, this was not possible. Thus, throughout this report, results with unverified facts have been noted.

Third, data used in this analysis from the original provider survey likely had selection bias. Although staff made substantial efforts to ensure a broad reach with the provider survey, respondents to the RFI were more likely to come from entities that were known to be actively working on sustainability efforts, many of which were large health systems more working with one of the three GPOs included in the survey. This fact may have skewed the results to show a higher level of commitment and/or capacity in promoting internal and contractual benchmarks and standards in addressing the climate crisis. Limitations from the provider RFI survey are further explicated in Part Five of the Committee's report.

Fourth, the survey administrators had no control over which individuals at the organizations responded to the survey, which may have affected the quality and reliability of the information provided to the Committee. In some cases, this may have resulted in incomplete or incorrect information being reported.

Finally, given the breadth of information provided to the Committee, the analysis required individual staff members to make a series of judgement calls when summarizing materials. While staff sought to employ an objective and standardized approach to its review of all submissions, there were likely some inevitable inconsistencies in approach.

Despite these limitations, this analysis as part of the larger study on the climate crisis is the first of its kind to examine the ways GPOs respond to extreme weather events on behalf of their members and leverage their purchasing power to influence environmental, social, and governance changes across the health care supply chain. Given the large environmental footprint of the health care supply chain, more work is urgently needed to examine ways to curb greenhouse gas emissions and promote sustainability.